

# 5.16 Utilities and Service Systems

This section examines whether Project implementation will result in substantial adverse physical impacts associated with the provision of new or physically altered utilities and service systems, the construction of which could cause significant environmental impacts. The analysis also examines the potential for Project implementation to overload utilities and service systems. The utilities and service systems examined in this section include drainage, water, wastewater, energy, solid waste and telecommunications infrastructure.

This analysis focuses on utilities and service system impacts associated with the adoption and implementation of the proposed General Plan, adoption and implementation of the revised Zoning Code and Subdivision Code, and adoption and implementation of the Magnolia Specific Plan, as these actions have the potential to cause additional demand for utilities and need for additional or expanded service systems. The Citywide Design Guidelines and Sign Guidelines only address site planning, building design and community aesthetics and are thus not considered relevant to this analysis.

## Drainage Systems

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### Environmental Setting

The Riverside County Flood Control and Water Conservation District (RCFCWCD) is responsible for the operation and maintenance of regional flood control facilities such as dams, flood basins, levees, open channels and regional underground storm drains. In most cases, RCFCWCD does not maintain storm drain inlets or pipes less than 36 inches in diameter. The RCFCWCD is also responsible for construction of new facilities called for in its adopted Master Drainage Plan. Smaller drainage facilities, consisting mostly of underground closed conduits and storm drains located primarily in developed areas of the Planning Area, are typically maintained by City or County Transportation Department crews. These local facilities collect stormwater and convey it to regional facilities, including the Santa Ana River and the many arroyos located in the Planning Area. **Figure 5-43** depicts major features of the Planning Area drainage system.

RCFCWCD has identified the La Sierra Channel, from Arlington Channel upstream to Norwood Avenue, as severely undersized for a 100-year storm event. Funds for improvements to this facility have been allocated, and improvements are anticipated to be completed within 2 to 5 years.<sup>1</sup> Additional facilities within the Planning Area that are undersized include: Center Street Storm Drain, which outlets at Transit Avenue into an existing, privately maintained interim channel located within the City of Grand Terrace; and Spring Street Channel, which outlets into Springbrook Wash along California Avenue. RCFCWCD does not have any specific plans for improvements to these facilities.

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<sup>1</sup> Diaz, Arturo, Senior Civil Engineer, Riverside County Flood Control and Water Conservation District. Letter to Rick Brady of Cotton/Bridges/Associates dated May 20, 2004.

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**(FIGURE 5-43 – DRAINAGE FACILITIES – color 11X17)**

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## Thresholds for Determining Level of Impact

For the purpose of this EIR, a significant impact will occur if implementation of the Project will require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. A significant impact will also occur if Project implementation results in an overloading of or deterioration to the City's storm water drainage facilities.

## Environmental Impact

Development pursuant to Project policies and regulatory standards will result in the addition of up to 38,100 new dwelling units and 39,600,000 square feet of new non-residential construction over the 20-year horizon of the General Plan within the Planning Area. Increased development within the Planning Area will result in an increase of impervious surface areas. Increased impervious surface area will generate increased stormwater flows with potential to impact drainage facilities and require the provision of additional facilities.

As depicted in **Figure 5-43**, large portions of the Planning Area are not currently served by local or regional drainage facilities. These areas roughly correspond to areas proposed for low density/intensity development in the southern and eastern portions of the Planning Area. In addition, the Center Street Storm Drain and the Spring Street Channel are currently undersized. As a result, local and regional drainage facilities may have to be expanded or new facilities constructed to accommodate both existing and planned development. As this is a first-tier, program EIR, CEQA analysis of the construction of such specific facilities may be properly deferred until plans for such facilities are developed. Since detailed plans are not developed, mitigation for any such facilities would be speculative at the programmatic level of analysis.

The General Plan Public Facilities Element includes the following objective and policy related to drainage facilities:

**Objective PF-4: Provide sufficient levels of storm drainage service to protect the community from flood hazards and minimize the discharge of materials into the storm drain system that are toxic or which would obstruct flows.**

**Policy PF-4.1:** Continue to fund and undertake storm drain improvement projects as identified in the City of Riverside Capital Improvement Plan.

**Objective LU-8: Emphasize smart growth principles through all the steps of the land development process.**

The policies listed above will significantly lessen impacts directly related to the Project. Individual development proposals will continue to comply with existing City standards and practices regarding storm drain facilities. These standards and practices include:

- Implement CEQA during the development review process for future projects. Analyze and mitigate potential public facility, service and utility impacts to the maximum extent practicable. For projects that require construction of new public facilities or extension of utilities, ensure that the environmental documentation considers related off-site physical environmental impacts of these activities.
- Require engineering studies to determine flood control facility requirements for future development projects. Ensure analysis distinguishes between local (City maintained) flood control facilities and regional facilities (maintained by the US Army Corps of Engineers, Santa Ana Watershed Project Authority or Riverside County Flood Control and Water Conservation District). Require that study recommendations be incorporated into the design of these projects. Require the dedication of necessary right-of-way and construction of flood control facilities for all development projects.
- Coordinate with the U.S. Army Corps of Engineers, Santa Ana Watershed Project Authority (SAWPA) and the Riverside County Flood Control and Water Conservation District (RCFCWCD) to ensure regularly scheduled maintenance of regional flood control channels and completion of necessary repairs. Coordinate review of future development projects to identify potential impacts to regional flood control facilities, necessary flood control improvements and establish installation programs for improvements.
- Provide ongoing monitoring of storm water drainage facilities to assess if facilities are overwhelmed; identify and implement needed improvements where necessary.
- Collect a storm drain fee with each new building permit, which is used to build new drainage facilities across the City as needed.
- Require each new development to build drainage facilities directly related to the development. Where a development affects a County Master Plan drainage facility, the City conditions development approval upon provision of any needed improvements to the County facility.

With adherence to and implementation of the above-listed General Plan objectives and policies, along with continued adherence to the above noted standards and practices, impact on storm drainage facilities will be less than significant at the programmatic level.

The specific environmental impact of constructing any storm water and drainage facilities cannot be determined at this programmatic level of analysis because no specific development projects are proposed; however, all development pursuant to the Project, including storm water and drainage facilities, may result in potentially significant impacts that will be evaluated and addressed on a case-by-case basis if and when specific projects are proposed.

## Mitigation Measures

No mitigation is required as the impact will be less than significant at the programmatic level.

## Level of Impact after Mitigation

Impact is less than significant at the programmatic level.

## Water Service

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### Environmental and Regulatory Setting

The City of Riverside established its own water utility, the Riverside Public Utilities Department (RPU), in 1913. As of 2003, the RPU provided water service through approximately 58,500 water service connections within the City of Riverside, and operated 47 domestic wells, 18 irrigation wells, 16 reservoirs, and 38 pumping stations. RPU's service area encompasses 74 miles, of which approximately 68.5 square miles area within the City limits and 5.6 miles outside the City limits. In addition to water service by the RPU, approximately 9 square miles within the southeast portion of the City of Riverside are served by Western Municipal Water District (WMWD) and 0.9 square miles are served by the Eastern Municipal Water District (EMWD). Water purveyor/district boundaries are depicted in **Figure 5-44**. Portions of the Planning Area currently served with water infrastructure are depicted in **Figure 5-45**.

Urban water purveyors are required to prepare and update an Urban Water Management Plan (UWMP) every five years. The RPU and WMWD adopted their plans in 2002 and 2000, respectively. The UWMPs address water supply, treatment, reclamation and water conservation, and also contain a water shortage contingency plan. Local UWMPs, such as those prepared by the RPU and WMWD, are supplemental to the regional plans prepared by the Metropolitan Water District of Southern California (MWDSC). The UWMPs are based in part on local land use plans, which are used to project the long-term water needs of respective service areas.

The City of Riverside adopted a Water Master Plan in 1988 which identified anticipated water facility improvements needed over a 20 year period. The 1988 Water Master Plan underwent environmental clearance per CEQA guidelines. The City is in the process of updating the Water Master Plan and it is anticipated that the plan will be completed in 2005. The updated Water Master Plan will be subject to separate CEQA review, although this EIR may be used as a reference in the Water Master Plan's CEQA review.

Sections 10910-10915 of the California Water Code require preparation of a 20-year Water Supply Assessment for certain projects; demonstrating available water supplies exist to

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**Figure 5-44**  
**Water Service Areas**

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**Figure 5-45**  
**Water Facilities**

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support development that meets specific criteria outlined in the Water Code sections that is proposed in the Planning Area. Depending on the location of proposed development subject to these sections of the Water Code, the Water Supply Assessment will come from the RPU, WMWD, or EWMD on a project-by-project basis. According to the California Department of Water Resources, these provisions of the California Water Code do not apply to General Plan updates; however, specific future development projects allowed under the General Plan that meet the criteria established in the Water Code will require a water supply assessment.<sup>2</sup>

California Government Code Section 66473.7 requires a determination from the applicable public water system that sufficient long-term water supply is available to meet the projected demand associated with large subdivisions (500 or more units).

The City supports the following programs sponsored by the RPU and WMWD:

Clothes Washer Rebate Program: Riverside Public Utilities customers who receive both electric and water services are eligible for a \$175 rebate towards a new water and energy saving clothes washer. Riverside Public Utilities customers who receive only electric service are eligible for a \$75 rebate, while customers who receive only water service are eligible for \$100 rebate.

Residential Ultra Low-Flush Toilet Water Conservation Incentive Program: This is a water conservation incentive program of RPU that offers residential water customers a chance to replace their existing high water use toilet fixtures for water saving ultra low-flush toilets. Rebates of up to \$55 are provided for each ultra low-flush toilet installed that uses 1.6 gallons of water or less per flush. WMWD offers a similar program, which provides a credit on the water bill of up to \$75 to customers who replace their old, non-conserving toilets with newer, ultra-low-flush toilets.

Energy and Water School Education Program: For almost 20 years, RPU has provided educational support to the approximately 100 schools, including most of the schools in Riverside and Alvord Unified School Districts, as well as many private schools. In 2001-2002, close to 3500 students actively participated in the RPU educational program, and 44,000 received educational materials.

Water Recycling: The City of Riverside owns and operates the 30 million gallon per day (mgd) Riverside Water Quality Control Plant. The plant currently discharges tertiary-treated water effluent to the Santa Ana River. RPU is currently providing a small amount of recycled water for irrigation of a golf course and is planning to expand the use of recycled water for non-potable uses. The RPU is currently conducting a study to evaluate feasibility of expanding the use of recycled water. The recycled water will replace domestic water currently used for golf courses and parks, and therefore, will reduce the domestic water demand. RPU anticipates using approximately 2,000 acre-feet per year of recycled water by 2005, with preliminary projection of 41,000 acre-feet per year in the future.

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<sup>2</sup> Todd, Dave. California Department of Water Resources. Telephone conversation with Rick Brady of Cotton/Bridges/Associates on August 22, 2004.

Western's Landscapes Southern California Style: In 1989, WMWD, in conjunction with the UC Cooperative Extension, opened *Landscapes Southern California Style*. Located on Alessandro Boulevard in the City of Riverside, this one-acre conservation garden includes more than 200 species of plants. Visitors to the garden can take a self-guided tour and peruse the plant materials, layouts and irrigation systems that contribute to water efficiency. The Garden receives approximately 13,000 visitors per year.

Water Education for Life: Since 1982, WMWD has provided regional water education programs to public and private schools within Riverside County. Materials, speakers, lesson plans and theatre programs are provided at no cost. Students learn about where water comes from, water conservation, how water is used and water reclamation.

## Riverside Public Utilities (RPU)

### Water Supply

RPU's current and projected water supplies are presented in Table 5.16-1. RPU obtains all but a small portion of its water from groundwater basins in the area. As of 2003, a small amount of treated imported water is purchased during emergencies and when the groundwater supply does not meet the peak demands during few hot summer days.

In the future, RPU anticipates approximately 2,000 acre-feet per year of recycled water by 2005 and expects this to increase to 31,000 acre-feet per year by 2020. Recycled water will be utilized for uses such as landscape irrigation to reduce domestic water demand.

**Table 5.16-1**  
**Current and Projected Domestic Water Supply (acre-feet/year)**  
**Riverside Public Utilities Department**

Water Supply Sources	2000	2005	2010	2015	2020
<i>Available Domestic Water Supply</i>					
Groundwater	77,261	96,200	106,200	106,200	106,200
Imported Water <sup>1</sup>	365	400	400	400	400
Recycled Water <sup>2</sup>		2,000	5,000	10,000	31,000
Seven Oaks Dam <sup>3</sup>			2,000	2,000	2,000
<i>Subtotal</i>	<i>77,626</i>	<i>98,600</i>	<i>113,600</i>	<i>118,600</i>	<i>118,600</i>
Irrigation/Exchange	10,093	10,000	10,000	10,000	10,000
<b>Total</b>	<b>87,719</b>	<b>108,600</b>	<b>123,600</b>	<b>128,600</b>	<b>128,600</b>

Source: City of Riverside Public Utilities Department, *Urban Water Management Plan*, 2002.

<sup>1</sup>Imported treated water purchased from WMWD during hot summer days

<sup>2</sup>Recycled water to replace use of domestic water for landscaped areas.

<sup>3</sup>Anticipated supply from the Seven Oaks Dam Conservation Pool.

The City anticipates the production of approximately 10,000 acre-feet annually of groundwater for irrigation use. Of this amount, 8,000 acre-feet per year of non-potable irrigation water would be delivered to the Gage Canal Company in exchange for 6,400 acre-feet of potable water.

According to the RPU Urban Water Management Plan, projected domestic water demand is expected to increase from 77,626 acre-feet per year in 2000 to 94,886 acre-feet per year in 2020 (Table 5.16-2).

**Table 5.16-2**  
**Current and Projected Water Use (acre-feet/year)**  
**Riverside Public Utilities Department**

<b>Water Use Sector</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>
Residential <sup>1</sup>	42,949	45,139	47,442	49,862	52,404
Commercial	11,796	12,398	13,030	13,694	14,393
Industrial	10,870	11,424	12,006	12,619	13,263
Agriculture <sup>2</sup>	1,180	1,268	1,332	1,400	1,471
Sale to WMWD <sup>3</sup>	3,143	4,000	4,000	4,000	4,000
Other	408	429	451	474	498
Unaccounted for Water	7,280	7,625	8,017	8,426	8,857
<i>Subtotal Domestic Demand<sup>4</sup></i>	<i>77,626</i>	<i>82,283</i>	<i>86,278</i>	<i>90,475</i>	<i>94,886</i>
Irrigation/Exchange	10,093	10,000	10,000	10,000	10,000
<b>Total</b>	<b>87,719</b>	<b>92,283</b>	<b>96,278</b>	<b>100,475</b>	<b>104,886</b>

Source: City of Riverside Public Utilities Department, *Urban Water Management Plan*, 2002.

Notes:

<sup>1</sup>The residential category represents both single family and multi-family residential users and is based on an average use per connection of 0.8 acre-feet per year.

<sup>2</sup>The agriculture category consists of that portion of the domestic water use primarily for irrigation purposes.

<sup>3</sup>Riverside has also been delivering domestic supplies to WMWD since 1992 and the future domestic water delivery to WMWD is assumed to remain at 4,000 acre-feet per year.

<sup>4</sup>Domestic uses assumed to increase approximately 1% per year

The irrigation/exchange category is primarily the non-potable water delivery for the exchange program and includes water losses in the conveyance system. RPU has an agreement with the Gage Canal Company to exchange non-potable irrigation water for domestic water. It is expected that water for the exchange program will be 10,000 acre-feet per year. The total water demand for RPU by 2020 is projected to be 104,886 acre-feet per year.

RPU anticipates that supply will exceed demand by 23,600 acre-feet per year in 2020. RPU's 2020 water demand was based on a service area (covering 68.5 square miles within the city limits and 5.6 square miles outside the city limits) population of 316,000.

Development pursuant to Project policies and regulatory standards will result in the addition of up to 36,100 new dwelling units and 39.6 million square feet of new non-residential construction over the 20-year horizon of the General Plan within the Planning Area, which encompasses not only Riverside City limits but also the northern and near southern spheres of influence.

## Groundwater Supply

The City of Riverside has water supply wells in the Bunker Hill, Colton, Riverside North, Riverside South and Arlington groundwater basins. The City produces water from Bunker Hill, Riverside North, and Riverside South basins for domestic use. Water is not extracted for domestic use from the Arlington and Colton basins because of poor water quality and lack of transmission lines. The wells in Riverside North, Arlington, Riverside South and Colton basins provide irrigation water.

Groundwater production from the Bunker Hill Basin is delivered through the Gage Canal and San Bernardino 42-inch transmission pipelines to the Linden-Evans Reservoirs for

distribution. The Gage wells, collectively referred as the Gage system, discharge into the Gage transmission pipeline. Production from the Gage system and the wells in North Riverside Basin (DeBerry and Van Buren wells) is shared with the Gage Canal Company at the Linden Street Turnout in the vicinity of Lemona Booster Station.

City wells in the Bunker Hill Basin, which discharge into the San Bernardino 42-inch pipelines, are referred to as the Waterman System. The water from the Electric Street well in the Riverside South Basin is also discharged into the San Bernardino 42-inch pipeline. Some of the water from the Waterman system is delivered to the industrial distribution system (Sugarloaf 1200 zone) at the Iowa Booster Station located upstream from the Linden-Evans Reservoirs. The water from Raub 5 well is currently treated for trichloroethylene (TCE) and perchloroethylene (PCE). Most of the water from the San Bernardino 42-inch pipeline and Gage pipeline is conveyed to the Linden-Evans reservoirs for blending and distribution.

A small amount of water is produced from the Stewart 20 well for landscape irrigation in the vicinity of the well site. Thorne 10 and 11 wells are leased to a golf course in the area for irrigation purposes.

## Wells

The City owns a total of 133 active and inactive wells: 69 in the Bunker Hill Basin, 17 in the Riverside North Basin, 28 in the Riverside South Basin, 5 in the Colton Basin and 14 in the Arlington Basin. In 2000, overall well utilization was 60 percent in the Bunker Hill Waterman System, 76 percent in the Bunker Hill Gage System, 49 percent in the Riverside North Basin and 36 percent in the Riverside South Basin. Only 14 percent of capacity of a well in Colton Basin was used, and no well was used in the Arlington Basin.

Of the 69 wells in the Bunker Hills Basin, 40 are used for domestic supply and 3 for irrigation supply. The remaining wells are either inactive or used for water level monitoring. Of the 17 wells in the North Riverside Basin, 3 wells are used for domestic supply and 3 for irrigation supply. The remaining wells are either inactive or used for monitoring purposes.

In the Riverside South Basin, 5 domestic wells and 10 irrigation wells were in operation in 2000. The remaining wells were either used for monitoring or were out of service. Three of the wells were used for domestic supply in the past (Moore-Griffith, Palmyrita 2, and Twin Spring) have not been used for domestic supply within the past several years because of dibromochloropropane (DBCP) contamination.

The wells in the Arlington Basin are not currently being used because of poor water quality. Most of the wells are, however, on stand-by for emergency situations. During the 1985-2000 period, 74 of the existing wells were in operation with production rates ranging from nearly zero to over 5000 acre-feet/year. If the wells are operated continuously, without regard to water rights, the following quantities of water could be produced from each basin/system. Table 5.16-3 lists the wells in each basin/system and includes their capacity.



**Table 5.16-3  
Well Characteristics**

<b>Basin/System</b>	<b># of Wells</b>	<b>Production Capacity (acre-feet)</b>
Bunker-Hill-Waterman System	25	53,498
Bunker Hill-Gage System	16	46,111
Bunker Hill-Irrigation	7	3,858
Colton	2	3,941
Riverside North	10	20,979
Riverside South	12	43,659
Arlington	1	1,565
<b>Total</b>	<b>74</b>	<b>173,611</b>

Source: City of Riverside Public Utilities, *Water Supply Report - Draft*, March 2003.

## Imported Water Facilities

The City can purchase up to 39 mgd of treated water from the Metropolitan Water District's (MWD) Mills Filtration Plant. Currently, 13,400 gallons per minute (gpm) can be conveyed through an existing 30-inch pipeline from the Mills Filtration Plant to Campbell Reservoir, and another 13,000 gpm can be delivered to the Van Buren Boulevard and Mockingbird Reservoirs through the Van Buren connection.

The City is able to increase the flow capacity from the Mills Filtration Plant to 18,000 gpm by increasing the meter size on the existing 30-inch pipeline. Another 13,000 gpm can be purchased at the Mills Filtration Plant by constructing an additional pipeline from the plant to Campbell Reservoir. The capacity of the Mills Filtration Plant is 326 mgd.

## Transmission Pipelines

Capacity of the City's transmission lines is listed in Table 5.16-4. With construction of the North Orange transmission line, the total capacity would be approximately 105,000 gpm (151.2 mgd). However, the capacity of the North Orange line is limited the capacity of the existing wells, which is approximately 18,500 gpm (26.6 mgd).

**Table 5.16-4  
Capacity of the City's Transmission Facility**

<b>Pipeline</b>	<b>gpm</b>	<b>mgd</b>
San Bernardino 42"	29,000	41.8
Gage Pipeline	36,000	51.8
North Orange 60"	40,000	57.6
<b>Total</b>	<b>105,000</b>	<b>151.2</b>

Source: City of Riverside Public Utilities, *Water Supply Report - Draft*, March 2003.

## Storage Facilities

The City's water system presently has 16 storage facilities at 15 different locations within the system. The total capacity of the reservoirs is 100.4 million gallons, of which 52 million gallons are located in the gravity zone (see **Table 5.16-5**). The water from the gravity zone is pumped into the zones of higher elevation and by successive steps pumped to the next higher zone. This results in reservoirs being located at many different elevations. During summer months, water is purchased from the WMWD at the Mills Filtration Plant and conveyed to Campbell Reservoirs, thus reducing the booster pumping requirements to the upper zones along Alessandro Boulevard.

**Table 5.16-5  
Existing Reservoirs**

<b>Reservoir</b>	<b>Capacity (MG)</b>	<b>Primary Zone Served</b>	<b>Date of Construction</b>	<b>Construction Type</b>
Alessandro	2.0	1300	1961	Above Ground Concrete
Campbell	4.9	1600	1979	Partially buried concrete
Emtman	5.0	1200	1968	Buried Concrete
Evans	16.0	Gravity	1968	Above Ground Concrete
Heustis	2.0	1400	1978	Buried Concrete
Linden	16.0	Gravity	1927	Partially Buried Concrete
Mockingbird	20.0	Gravity	1981	Buried Concrete
Piedmont	1.0	1400	1979	Partially Buried Concrete
Ross	2.0	1400	1978	Buried Concrete
Sugarloaf	5.0	1200	1963	Above Ground Concrete
Tilden	10.0	1010	1995	Buried Concrete
University City	3.0	1600	1992	Buried Concrete
Van Buren	7.5	1200	1992	Buried Concrete
Whitegates#1	0.5	1400	1960	Partially Buried Concrete
Whitegates #2	0.5	1600	1960	Partially Buried Concrete
<b>Total System Storage Capacity: 100.4 MG</b>				

Source: City of Riverside Public Utilities, *Water Supply Report - Draft*, March 2003.

## Treatment Plants

As of 2003, RPU operated five treatment plants that remove trichloroethylene (TCE), perchlorate and dibromochloropropane (DBCP) contaminants. DBCP contamination is primarily related to past herbicide use in orange groves; use of the herbicide has been banned since the early 1980s. RPU also operates three chlorination stations that use chlorine gas or chlorine dioxide to kill harmful bacteria.

## Western Municipal Water District

Western Municipal Water District (WMWD) was formed by the voters in 1954 to bring supplemental water to growing western Riverside County. As of 2004, WMWD serves more than 18,000 domestic retail customers, 260 retail agricultural customers, 181 commercial customers, 172 other users (such as landscaping, fire flow, etc) and 9 wholesale customers. WMWD's water sources include the Colorado River, State Water Project and the City of Riverside.

As a member agency of the Metropolitan Water District of Southern California, WMWD provides supplemental water to the cities of Corona, Norco and Riverside and the water agencies of Elsinore Valley and Rancho California. WMWD serves customers in the unincorporated areas of El Sobrante, Eagle Valley, Temescal Creek, Woodcrest, Lake Mathews and March Air Reserve Base. WMWD operates and maintains domestic and industrial wastewater collection and conveyance systems for retail and contract services customers in Lake Hills, March Air Reserve Base, Home Gardens and Norco.

WMWD's general district consists of a 510-square-mile area of western Riverside County; approximately 9 square miles of WMWD's service area falls within the Riverside Planning Area. The District operates 55 pumps and 242 miles of pipeline. WMWD currently sells approximately 84,000 acre-feet of water annually, including 66,000 acre-feet of potable and 18,000 acre-feet of non-potable water.

About 60 percent of the water WMWD sells is treated; the balance is untreated or raw water. About one-third of WMWD's water sales are for domestic purposes; the rest wholesale. Nearly all water sold by WMWD for agricultural purposes is used to irrigate citrus and avocados.

## Water Sources

As of baseline year 2000, WMWD had a water supply of 74,500 acre-feet/year from various sources; water supplies are expected to increase to 217,000 acre-feet/year by 2020 (see **Table 5.16-6**). WMWD's primary source of water is the Metropolitan Water District of Southern California, with a seasonally low demand secondary supply provided by the City of Riverside.

Future water sources include the March Reserve Pipeline, the Riverside Agricultural Pipeline and the proposed Riverside/Corona feeder project. With the release of Proposition 13 funding, the Riverside Agricultural Pipeline project is scheduled for completion in 2005. This line will inter-tie the Gage Canal company and take higher nitrate waters and pump these supplies into Western's service area. This new line will tie into the exiting March Air Reserve Base irrigation system, which Western operates. This line will also receive reclaimed water from the March Wastewater Plant. This will provide a dual source of water for the existing citrus industry and other users, freeing up domestic supplies. The Riverside/Corona Feeder project will capture and store new water in wet years in order to increase water supplies, reduce water costs and improve water quality.

**Table 5.16-6**  
**Current and Projected Domestic Water Supply (acre-feet/year)**  
**Western Municipal Water District**

<b>Water Supply Sources</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>
<i>Purchased from Wholesaler</i>					
Metropolitan Water District of So. Cal <sup>1</sup>	72,000	116,000	132,000	145,000	167,000
City of Riverside <sup>2</sup>	2,000	2,000	2,000	2,000	2,000
Supplier produced groundwater <sup>3</sup>	0	10,000	10,000	10,000	10,000
Supplier produced surface diversions	–	–	–	–	–
Transfers	–	–	–	–	–
Exchanges	–	–	–	–	–
<i>Recycled Water</i>					
March Air Reserve Base	500	2,000	2,000	2,000	2,000
Riverside Agricultural Pipeline <sup>4</sup>	0	6,000	6,000	6,000	6,000
<b>Total (acre feet/year)</b>	<b>74,500</b>	<b>136,000</b>	<b>182,000</b>	<b>195,000</b>	<b>217,000</b>

Source: Western Municipal Water District, Urban Water Management Plan, 2000.

Notes: USBR- US Bureau of Reclamation. DWR: Department of Water Resources

<sup>1</sup>Projections from MWD 9/20/99 "Western Demand Summary" Includes water supplies agencies.

<sup>2</sup>From City of Riverside-off season domestic purchases.

<sup>3</sup>Proposed Riverside/Corona Feeder project

<sup>4</sup>Agricultural pipeline project

## Water Use

WMWD's projected water demand from water retailers in 2020 is 30,310 acre-feet/year, with an additional projected 1,575 acre-feet/year in unaccounted for system losses, which includes evaporation and leaks due to flaws in the system (**Table 5.16-7**). In 2020, WMWD also expected to distribute 60,000 acre-feet/year for wholesale water usage.

**Table 5.16-7**  
**Current and Projected Water Use**  
**Western Municipal Water District**

<b>Water Use Sectors</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>
Residential	12,351	14,500	18,500	21,500	25,000
Commercial	1,118	1,500	1,800	1,950	2,100
Industrial					
Institutional and government	225	280	350	420	490
Landscape	997	1,200	1,290	1,380	1,470
Agriculture	9,254	7,000	4,500	3,000	1,250
<b>Total</b>	<b>23,944</b>	<b>24,480</b>	<b>26,400</b>	<b>28,250</b>	<b>30,310</b>
Wholesale Water Distributed	51,150	52,500	55,000	58,000	60,000
<i>Additional Waster Uses</i>					
Unaccounted for system losses	1,200	1,225	1,325	1,420	1,575

Source: Western Municipal Water District, Urban Water Management Plan, 2000.

WMWD anticipates that supply will exceed demand by 125,425 acre-feet per year in 2020.

## Thresholds for Determining Level of Impact

For the purpose of this EIR, a significant impact will occur if implementation of the Project will:

- Require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or
- Result in a demand for water that exceeds the capacity of the existing entitlements and resources.

## Environmental Impact

Development pursuant to Project policies and regulatory standards will result in the addition of up to 38,100 new dwelling units and 39,600,000 square feet of new non-residential construction over the 20-year horizon of the General Plan within the Planning Area. Only 0.9 square-miles of the Planning Area are served by the Eastern Municipal Water District (EMWD), and the Project will minimally affect EMWD water supply and infrastructure in this area. Impacts to EMWD are thus anticipated to be less than significant. The following is thus an assessment of the Project's impacts to RPU and WMWD supply and facilities.

### Water Supply

The RPU and WMWD Urban Water Management Plans project that adequate water supplies will be available for the Planning Area through the year 2020. RPU anticipates that supply will exceed demand by 23,600 acre-feet per year in 2020, while WMWD projects an excess of 125,425 acre-feet per year in 2020. RPU's and WMWD's projections are based on SCAG growth projections. Development under Project policies is expected to yield a population growth generally consistent with SCAG projections.

According to the RPU Urban Water Management Plan, projected domestic water demand is expected to increase from 77,626 acre-feet per year in 2000 to 94,886 acre-feet per year in 2020. The projected water demand (94,886 acre-feet) is well below the water supply anticipated to be available to the RPU in that year (128,600 acre-feet).

For 2020, WMWD has projected water demand from water retailers to be 30,310 acre-feet/year, with an additional projected 1,575 acre-feet/year in unaccounted for system losses. In 2020, WMWD also expects to distribute 60,000 acre-feet/year for wholesale water usage. The total anticipated water demand in 2020 (roughly 90,000 acre-feet) is far below the 217,000 acre-feet that the UWMP anticipates will be available that year. Given WMWD's projected surplus and because WMWD provides service to a relatively small portion of the Planning Area, the Project is not anticipated to significantly impact WMWD's water long-term water supply.

RPU's water demand and supply projections presented in Tables 5.16-1 and 5.16-2 above are based on a 2020 service area population of 316,000. As shown in Figure 5-44, RPU's

service area is a subset of the Planning Area. By 2025, the population projection for the area within 2004 City boundaries is approximately 330,000. In all, RPU's growth projections for its service area are relatively similar to population projections under the Project. RPU water supply impacts are less than significant at the programmatic level.

The General Plan Open Space and Conservation Element and Public Facilities Element includes the following objectives and policies that will reduce water consumption and potential water supply impacts:

**Objective OS-10: Preserve the quantity and quality of all water resources throughout Riverside.**

Policy OS-10.1: Support the development and promotion of water conservation programs.

Policy OS-10.2: Coordinate plans, regulations and programs with those of other public and private entities which affect the consumption and quality of water resources within Riverside.

Policy OS-10.3: Provide incentives such as structured water rates to encourage residential and businesses customers to use less water.

Policy OS-10.4: Develop a recommended native, low-water-use and drought-tolerant plant species list for use with open space and park development. Include this list in the landscape standards for private development.

Policy OS-10.5: Establish standards for the use of reclaimed water for landscaping.

Policy OS-10.8: Cooperate with Riverside and San Bernardino Counties and adjacent jurisdictions in the review and approval of new developments which affect the quality and quantity of basin-wide groundwater and surface water resources.

**Objective PF-1: Provide superior water service to customers.**

Policy PF-1.1: Coordinate the demands of new development with the capacity of the water system.

Policy PF-1.2: Support the efforts of the Riverside Public Utilities Department, Eastern Municipal Water District and Western Municipal Water District to work together for coordination of water services.

Policy PF-1.3: Continue to require that new development fund fair-share costs associated with the provision of water service.

Policy PF-1.4: Ensure the provision of water services consistent with the growth planned for the General Plan area, including the Sphere of Influence, working with other providers.

Policy PF-1.5: Implement water conservation programs aimed at reducing demands from new and existing development.

Policy PF-1.6: Examine creating a “gray water” ordinance which would provide incentives for new residential development to construct a gray water reclamation system. This system would keep water re-circulating in the home before going into sewage system.

**Objective PF-2: Find new and expanded uses for recycled wastewater.**

Policy PF-2.1: Expand the use of reclaimed water for irrigation and other applications.

Policy PF-2.2: Continue to monitor and study the costs of extending recycled water service to developing areas for accepted applications.

The policies listed above will significantly lessen impacts directly related to the Project. Individual development proposals will continue to comply with existing City standards and practices regarding water supply. These standards and practices include:

- Implement CEQA when reviewing future development projects to evaluate potential impacts on agricultural resources, biological resources, cultural and paleontological resources, energy supply, scenic resources, mineral resources, water resources, and water quality.
- Review all development projects in consultation with the applicable water district or purveyor to ensure adequate water supplies, treatment, and distribution capacity for projects without negative impact to the community. Sections 10910-10915 of the California Water Code also require preparation of a 20-year Water Supply Assessment for certain projects demonstrating available water supplies exist to support development.
- Continue to work with Western Municipal Water District, Riverside Highland Water Company, and Eastern Municipal Water District to implement their Urban Water Management Plans and ensure that adequate water supplies are available to meet the needs of current and future growth. Support efforts by these agencies to research and employ new technologies that improve water services and/or sustainability of water supplies serving the Riverside Planning Area.
- Regularly assess the cost of providing potable water for non-potable uses versus the cost providing reclaimed water, including associated infrastructure and facilities costs. Implement a reclaimed water system at the time it becomes cost effective to do so.
- Work with other regional water service providers to determine the feasibility of a broader-based reclaimed water system.
- Continue water conservation education and incentive programs for residential and business water users, such as the Pool and Spa Pump Incentive Program, Ultra Low Flush Toilet Conservation Program and Pool Saver Program.

- Continue community water conservation programs including Energy and Water School Education Program and Splash into Cash Program.

Adherence to and implementation of General Plan policies supporting water conservation, implementing CEQA on a project-by-project basis and requiring a water supply assessment from water purveyors for future development projects as applicable will ensure a less than significant water supply impact at the programmatic level.

## Water Infrastructure

Development consistent with the Project will result in the increase of residential and non-residential water users over existing conditions, requiring the extension or maintenance of, or new water filtration, treatment, and/or distribution facilities. RPU's long range plans call for new water infrastructure in the Planning Area to meet projected water demand. New facilities include six water storage reservoirs, eight booster pumping stations and two water treatment plants. Detailed plans of these facilities have not yet been created. As this is a first-tier, program EIR, CEQA analysis of these new facilities may be properly deferred until actual plans are proposed. Without such plans, mitigation for any such facilities is speculative at the programmatic level.

Although WMWD serves only nine square miles of the Planning Area and the Project does not anticipate significant future development within areas served by WMWD, WMWD may be required to expand or construct new water facilities to ensure adequate service. No specific new facilities or expansions are currently contemplated. As this is a first-tier, program EIR, CEQA analysis of these new facilities may be properly deferred until actual plans are proposed. Without such plans, mitigation for any such facilities is speculative at the programmatic level.

In addition, General Plan policies identified herein that encourage construction of new infrastructure for reclaimed water, while reducing impacts on water supply, could cause other environmental impacts. No specific reclamation facilities are currently proposed. As this is a first-tier, program EIR, CEQA analysis of these new facilities may be properly deferred until actual plans are proposed. Lacking such plans, mitigation for any water reclamation facilities is speculative at this programmatic level.

Notably, adherence to and implementation of other policies listed above that relate to water conservation will reduce the demand placed on existing water infrastructure.

The General Plan Public Facilities Element includes the following additional policies related to water infrastructure:

**Objective LU-8: Emphasize smart growth principles through all the steps of the land development process.**

**Objective PF-1: Provide superior water service to customers.**

**Policy PF-1.1:** Coordinate the demands of new development with the capacity of the water system.



- Policy PF-1.2: Support the efforts of the Riverside Public Utilities Department, Eastern Municipal Water District and Western Municipal Water District to work together for coordination of water services.
- Policy PF-1.3: Continue to require that new development fund fair-share costs associated with the provision of water service.
- Policy PF-1.4: Ensure the provision of water services consistent with the growth planned for the General Plan area, including the Sphere of Influence, working with other providers.
- Policy PF-1.5: Implement water conservation programs aimed at reducing demands from new and existing development.
- Policy PF-1.6: Examine creating a “gray water” ordinance which would provide incentives for new residential development to construct a gray water reclamation system. This system would keep water re-circulating in the home before going into sewage system.

**Objective PF-2: Find new and expanded uses for recycled wastewater.**

- Policy PF-2.1: Expand the use of reclaimed water for irrigation and other applications.
- Policy PF-2.2: Continue to monitor and study the costs of extending recycled water service to developing areas for accepted applications.

Adherence to and implementation of the policies listed above will significantly lessen impacts directly related to the Project. Individual development proposals will continue to comply with existing City standards and practices regarding water infrastructure. These standards and practices include:

- Require engineering studies to determine water infrastructure requirements for large-scale future development projects. Require that study recommendations be incorporated into the design of these projects. Require the dedication of necessary right-of-way and construction of water infrastructure improvements for all development projects.
- Implement the City’s Water Master Plan recommendations for replacement, maintenance and improvement of water services.
- Continue to work with the Western Municipal Water District to ensure adequate provision of water infrastructure.

Adherence to and implementation of General Plan policies and City practices related to water conservation identified above will reduce the demand on existing water infrastructure below a level of significance at the programmatic level.

However, future development projects under the General Plan could require improvement to these facilities. The specific environmental impact of constructing new water facilities cannot be determined at a programmatic level of environmental analysis. In a first-tier, program EIR, it is proper to defer analysis of such facilities until actual plans are proposed.

## Mitigation Measures

No mitigation is required, as the impact is less than significant at the programmatic level.

## Level of Impact after Mitigation

With adherence to and implementation of the above General Plan policies, the Project's water supply and water facilities impact will be less than significant at the programmatic level of analysis.

## Wastewater Service

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### Environmental Setting

The City of Riverside Public Works Department provides for the collection, treatment and disposal of all wastewater generated within the City of Riverside and complies with state and federal requirements governing the treatment and discharge of wastewater. Primary, secondary and tertiary treatment of wastewater from the Jurupa, Rubidoux and Edgemont Community Services Districts is also provided.

The wastewater collection system includes over 1,100 miles of gravity sewers ranging in size from 6 to 48 inches in diameter. The system also includes 18 wastewater pump stations, 3 of which are storm water pump stations. Most of the wastewater lift stations are designed for flows of 100 to 400 gpm. There are two large lift stations with design capacities in excess of 2,000 gpm. The three storm water pump stations have design capacities of approximately 500 gpm each. Existing sewer infrastructure within the Planning Area is depicted in **Figure 5-46**.

The Riverside Regional Water Quality Treatment Plant treats approximately 30 million gallons per day (mgd) of wastewater for 280,000 residents in the City of Riverside and the Jurupa, Edgemont and Rubidoux communities. The plant currently discharges tertiary-treated water effluent to the Santa Ana River. A team of 100 people operate the plant 24-hours a day, 365 days a year. In 2004, the plant had a capacity of 40 mgd and a planned expansion will allow the facility to treat up to 50 mgd.<sup>3</sup>

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<sup>3</sup> Claus, John, Riverside Wastewater Operations Manager, Riverside Regional Water Quality Control Plant. Electronic communication to Diane Jenkins of the City of Riverside on February 13, 2004.

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**Figure 5-46**  
**Sewer Infrastructure**

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Wastewater from the City of Riverside's residential, commercial and industrial contributors is collected through over 1,100 miles of sewer pipeline from five locations that flow into the plant. There are two separate wastewater treatment plants and one common tertiary filtration plant.

## Thresholds for Determining Level of Impact

For the purpose of this EIR, a significant impact will occur if implementation of the Project will:

- Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

## Environmental Impact

Development pursuant to Project policies and regulatory standards will result in the addition of up to 38,100 new dwelling units and 39,600,000 square feet of new non-residential construction over the 20-year horizon of the General Plan within the Planning Area. Although RPU has indicated that its Riverside Regional Water Quality Treatment Plan has sufficient capacity to treat wastewater generated within the Planning Area through the year 2025, portions of the Planning Area are not currently served with adequate infrastructure (trunk sewer lines). New and/or expanded sewer collection lines may be required to serve proposed land uses. As this is a first-tier, program EIR, CEQA analysis of the construction of such facilities may be properly deferred until plans for such facilities are developed. Since detailed plans for any such facilities have not been created, mitigation for any such facilities would be speculative at the programmatic level of analysis.

Given that the Riverside Regional Water Quality Treatment Plant currently treats approximately 30 million mgd of wastewater for 280,000 residents, the average wastewater collected and treated per resident is approximately 107 gallons per day (gpd). The Project anticipates approximately 100,000 new residents in the Planning Area by 2025, which would generate approximately 11 mgd of additional wastewater. With existing and projected demand within the Planning Area, the Riverside Regional Water Quality Treatment Plant would have a remaining capacity of 9 mgd at buildout of Project uses. Operators of the treatment plan estimate that Plant capacity is sufficient to serve the City's wastewater service needs through 2025.<sup>4</sup>

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<sup>4</sup> John Claus, Riverside Wastewater Operations Manager, Riverside Regional Water Quality Control Plant. Electronic communication to Diane Jenkins of the City of Riverside on February 13, 2004.

The General Plan Public Facilities Element includes the following objective and policies related to wastewater service provision:

**Objective PF-3: Maintain sufficient levels of wastewater service throughout the community.**

Policy PF-3.1: Coordinate the demands of new development with the capacity of the wastewater system.

Policy PF-3.2: Continue to require that new development fund fair-share costs associated with the provision of wastewater service.

In general terms, wastewater generation is a fraction (roughly 90 percent) of an area's potable water usage. As a result, General Plan policies that focus on water conservation also have the effect of reducing demand on the City's wastewater collection infrastructure and treatment infrastructure. The General Plan Open Space and Conservation and Public Facilities Elements include the following policies related to water conservation, the adherence to which will reduce the demand on existing wastewater infrastructure:

Policy OS-10.1: Support the development and promotion of water conservation programs.

Policy OS-10.3: Provide incentives such as structured water rates to encourage residential and businesses customers to use less water.

Policy OS-10.4: Develop a recommended native, low-water-use and drought-tolerant plant species list for use with open space and park development. Include this list in the landscape standards for private development.

Policy OS-10.5: Establish standards for the use of reclaimed water for landscaping.

Policy PF-1.5: Implement water conservation programs aimed at reducing demands from new and existing development.

Policy PF-1.6: Examine creating a "gray water" ordinance which would provide incentives for new residential development to construct a gray water reclamation system. This system would keep water re-circulating in the home before going into sewage system.

Adherence to and implementation of the policies listed above will significantly lessen impacts directly related to the Project. In addition, the following City standards and practices help reduce water consumption and therefore lessen demand on existing wastewater infrastructure and/or directly relate to ensuring adequate wastewater infrastructure for new development. These standards and practices include:

- Continue water conservation education and incentive programs for residential and business water users, such as the Pool and Spa Pump Incentive Program, Ultra Low Flush Toilet Conservation Program, and Pool Saver Program.

- Continue community water conservation programs including Energy and Water School Education Program, and Splash into Cash Program.
- Require engineering studies to determine wastewater infrastructure requirements for large-scale future development projects. Require that study recommendations be incorporated into the design of these projects. Require the dedication of necessary right-of-way and construction of wastewater infrastructure improvements for all development projects.
- Implement CEQA during the development review process for future projects. Analyze and mitigate potential public facility, service, and utility impacts to the maximum extent practicable. For projects that require construction of new public facilities or extension of utilities, ensure that the environmental documentation considers related off-site physical environmental impacts of these activities.
- Provide ongoing monitoring of waste water conveyance and treatment facilities to assess if facilities are overwhelmed; identify and implement needed improvements where necessary.

Adherence to and implementation of General Plan policies and City practices related to wastewater reduction and infrastructure identified above will yield less than significant impacts at the programmatic level.

The specific environmental impact of constructing new wastewater facilities cannot be determined at this programmatic level of analysis; however, like the development of other uses allowed under the Project, development and operation of public facilities, including wastewater facilities, may result in potentially significant impacts that will be evaluated and addressed on a case-by-case basis as specific projects are proposed, consistent with CEQA Guidelines Section 15152 regulations governing program EIRs.

## Mitigation Measures

No mitigation is proposed as the impact will be less than significant at the programmatic level.

## Level of Impact after Mitigation

With adherence to and implementation of the above-listed General Plan policies, Project impacts to wastewater facilities will be less than significant at the programmatic level.



# Energy

## Environmental Setting

Electrical service in most of the City of Riverside is provided by RPU. Southern California Edison (SCE) serves electrical customers outside of the City limits and to a few isolated areas within the City limits. The Southern California Gas Company (Gas Co.) supplies natural gas throughout the Planning Area.

Established in 1895, RPU's electrical system includes almost 90 miles of transmission lines and 1,095 miles of distribution lines. In 2001, RPU serviced 95,204 customers, including 85,584 residential, 9,087 commercial and 393 industrial customers.

As of 2003, the largest proportion (60 percent) of RPU's electrical power came from coal, followed by nuclear power (21 percent) and natural gas (6 percent). Approximately 12 percent of RPU's electrical power comes from renewable energy sources, including geothermal, wind, biomass/waste, small-scale hydroelectric and solar power. In 2002, RPU completed work on the Springs Substation, a 40-megawatt power plant dedicated for emergency power generation.

As of the 2000-01 fiscal year, the most recent year for which data is available, RPU's annual power supply was 2,606,300 megawatt hours (MWH). In the 2000-01 fiscal year, RPU customers used 1,750,000 MWH of electricity, resulting in an annual average of 7,125 kilowatt hours per residential household.<sup>5</sup> **Table 5.16-8** displays RPU customer's electricity use by land use type.

**Table 5.16-8**  
**RPU Customer Electrical Use**  
**(FY 2000-01)**

<b>Land Use</b>	<b>Electricity Use (MWH)</b>
Residential	610,000
Commercial	432,000
Industrial	654,000
Other	54,000
<b>Total</b>	<b>1,750,000</b>

Source: City of Riverside Public Utilities  
Department, *2000-2001 Financial Statements*, 2001.  
Notes: MWH = Megawatt Hours

<sup>5</sup> Supply and use data from the Riverside Public Utilities Department, *2000-2001 Financial Statements*, 2001.

## Thresholds for Determining Level of Impact

For the purpose of this EIR, a significant impact will occur if implementation of the Project will:

- Result in the use of substantial amounts of fuel and/or energy; or
- Result in substantial adverse physical impacts associated with the provision of new or physically altered energy transmission facilities, need for new or physically altered energy transmission facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable levels of service.

## Environmental Impact

Development pursuant to Project policies and regulatory standards will result in the addition of up to 38,100 new dwelling units and 39,600,000 square feet of new non-residential construction over the 20-year horizon of the General Plan within the Planning Area. New development within the Planning Area will result in additional energy demand and could require improvement of existing or extension of new energy facilities. As this is a first-tier, program EIR, CEQA analysis of the construction of such facilities may be properly deferred until plans for such facilities are developed. Since plans for any new required energy facilities have not been developed, mitigation for any such facilities would be speculative at programmatic level of analysis.

## Energy Supply

New development within the Planning Area consistent with the Project will result in additional demands for fuel and energy. **Tables 5.16-9** and **5.16-10** depict the anticipated demand increases for electricity and natural gas. The demand for electricity is anticipated to increase by 150.82 MWH per month, while the demand for natural gas is anticipated to increase by 174.44 million cubic feet (mcf) per month at buildout of Project land uses.

**Table 5.16-9  
Estimated Future Electricity Demand  
for Planning Area**

<b>Land Use</b>	<b>Usage Factor (kwh/ month)</b>	<b>Proposed (du/ksf)</b>	<b>Electricity Demand 2025 (mwh/month)</b>
Single-Family Residential	5,700/du	24,906 du	141.96
Multi-Family Residential*	3,940/du	2,082 du	8.20
Commercial**	20/ksf	8,827 ksf	0.18
Light Industrial and Office	17/ksf	26,235 ksf	0.45
Community Facilities	8/ksf	4,010 ksf	0.03
<b>TOTAL</b>			<b>150.82</b>

Sources: Generation Factors from the South Coast Air Quality Management District.

Notes: kwh = kilowatt hours; mwh = megawatt hours; du = dwelling units; sf = square feet; ksf = thousand square feet.

\*Land use designations with 15 du/acre or greater are assumed to be multi-family.

\*\*Commercial includes non-residential building floor area of Mixed-Use designations.

**Table 5.16-10  
Estimated Future Natural Gas Demand  
for Planning Area**

<b>Land Use</b>	<b>Usage Factor (cf/month)</b>	<b>Proposed (du/ksf)</b>	<b>Natural Gas Demand 2025 (mcf/month)</b>
Single-Family Residential	6,665.0/du	24,906 du	166.00
Multi-Family Residential*	4,011.5/du	2,082 du	8.35
Commercial	2.9/ksf	8,827 ksf	0.03
Light Industrial and Office	2.0/ksf	26,235 ksf	0.05
Community Facilities	2.0/ksf	4,010 ksf	0.01
<b>TOTAL</b>			<b>174.44</b>

Sources: Generation Factors from the South Coast Air Quality Management District.

Notes: cf = cubic feet; du = dwelling unit; sf = square feet; mcf = million cubic feet; ksf = thousand square feet

\*Land use designations with 15 du/acre or greater are assumed to be multi-family.

The General Plan Open Space and Conservation and Public Facilities Elements include the following objectives and policies, the adherence to which will reduce the demand on energy supplies throughout the Planning Area:

**Objective OS-8: Encourage the efficient use of energy resources by residential and commercial users.**

Policy OS-8.1: Support the development and use of non-polluting, renewable energy sources.

Policy OS-8.2: Encourage incorporation of energy conservation features in the design of all new construction and substantial rehabilitation projects and encourage the installation of conservation devices in existing developments.

Policy OS-8.3: Encourage private energy conservation programs that minimize high energy demand and that use alternative energy sources.

Policy OS-8.4: Incorporate solar considerations into development regulations that allow existing and proposed buildings to use solar facilities.

Policy OS-8.5: Develop landscaping guidelines that support the use of vegetation for shading and wind reduction and otherwise help reduce energy consumption in new development.

Policy OS-8.6: Require all new development to incorporate energy-efficient lighting, heating and cooling systems pursuant to the Uniform Building Code.

Policy OS-8.7: Encourage mixed use development as a means of reducing the need to automobile travel.

Policy OS-8.8: Encourage the use of clean burning fuels and solar energy for space and water heating purposes.

Policy OS-8.9: Encourage construction and subdivision design that allows the use of solar energy systems.

Policy OS-8.10: Support the use of public transportation, bicycling and other alternative transportation modes in order to reduce the consumption of non-renewable energy supplies.

Policy OS-8.11: Support public education programs for City residents and businesses to provide information on energy conservation and on alternatives to non-renewable energy sources.

**Objective OS-9: Encourage the efficient use of energy resources by the City of Riverside.**

Policy OS-9.1: Encourage the most energy-efficient design for local government facilities and equipment consistent with reasonable rate of return and the recognition of the environmental benefits from energy conservation.

Policy OS-9.2: Evaluate and implement measures to improve energy efficiency in City operations, including efficient load management systems in City buildings and regular energy audits of City facilities and operations.

**Objective PF-6: Provide affordable, reliable and, to the extent practical, environmentally sensitive energy resources to residents and businesses.**

Policy PF-6.1: Continue to support the development of green power and expand the use of green power in the City's energy portfolio.

Policy PF-6.3: Promote and encourage energy conservation.

Policy PF-6.4: Encourage energy-efficient development through its site plan and building design standard guidelines.

Policy PF-6.5 Promote green building design.

Adherence to and implementation of the policies listed above will significantly lessen impacts directly related to the Project. Individual development proposals will continue to comply with existing City standards and practices regarding energy consumption. These standards and practices include:

- Encourage residents to participate in various energy conservation programs, including the Cool Cash, Cool Returns, WE CARE and SHARE.
- Engage the local business community in the effort to reduce energy consumption. Examples of existing programs include Tree Power, Electrical Equipment and Machinery Incentive and Energy Efficient Construction Incentive programs.
- Continue to implement innovative solar energy projects such as the photovoltaic carport at the La Sierra Metrolink station and the Autumn Ridge Apartments.
- Continue to work with researchers at the University of Riverside to accelerate the development of new technology that could benefit Riverside and the rest of the country.
- Promote the *Community Energy Efficiency Program (CEEP)*. This voluntary program encourages residential building practices that conserve energy and resources 15% above Title 24 energy efficient requirements.
- Require that project proponents coordinate early in the development review process with the Public Utilities Department, Southern California Edison, and Southern California Gas Company as applicable to ensure adequate energy utility service and long-term supply is available.

- Implement CEQA when reviewing future development projects to evaluate potential impacts on agricultural resources, biological resources, energy supply, scenic resources, mineral resources, water resources and water quality.

Adherence to and implementation of General Plan policies and City practices related to energy consumption identified above will yield less than significant impacts at the programmatic level. No mitigation is required.

## Energy Facilities

Development consistent with the Project may require improvements to energy production, transmission and distribution facilities. Expansion of distribution and transmission lines and related facilities to provide adequate capacity is a consequence of growth and development. In addition to adding new distribution feeders, the range of electric system improvements needed to accommodate growth may include upgrading existing substation and transmission line equipment, expanding existing substations to their ultimate buildout capacity and building new substations and interconnecting transmission lines. Comparable upgrades or additions needed to accommodate additional load on the gas system could include facilities such as regulator stations, odorizer stations, valve lots and distribution and transmission lines.

RPU plans to build several new photovoltaic (PV) stations within the City. The new sites, together with three existing PV power stations at the Autumn Ridge Apartments, La Sierra Metrolink Station, and the Public Utilities Operation Center, are anticipated to generate additional renewable energy for the City.

Between January 2004 and July 2005, RPU will initiate the Downtown Power Upgrade Project to modernize electric circuitry equipment to meet the City of Riverside's future power needs. Currently, much of the electrical system serving Downtown Riverside is 50-75 years old, increasingly vulnerable to service failures. In addition, outdated 4-kilovolt (kV) capacity and key equipment is located below ground, which requires more personnel and more time to repair. A new, more reliable and stable 12-kV power system will handle present and future power demands and help avert potential service failures. Since the majority of the equipment will be surface mounted, it will enable a single technician to quickly access and service most problems.

Anticipating that RPU's two long-term contracts with the California Department of Water Resources will end in 2005 and 2008, the City of Riverside is planning to build two additional 48-megawatt "peak" power plants by May 2005. The natural gas powered plants will be tapped only during the hottest hours of the hottest summer days, when air conditioner use creates huge peaks in energy consumption. The plants are anticipated to be constructed simultaneously near the Santa Ana River north of the airport. These new plants will assist in keeping utility rates stable for both homeowners and businesses, and since the plants will not be connected to the state grid, the plants will keep critical services running in an emergency.

Adherence to and implementation of General Plan policies listed above that are related to energy conservation will help reduce demand on existing utility infrastructure. However,

development of land uses consistent with the Project could require extension and/or expansion of energy distribution facilities (electrical substations, and electricity and natural gas transmission/distribution lines).

Adherence to and implementation of the policies listed in the energy resources section above will substantially lessen energy demand over the lifetime of the Project, lessening the need for new energy facilities. Individual development proposals will continue to comply with existing City practices regarding energy facilities. These practices include:

- Require that project proponents coordinate early in the development review process with RPU, Southern California Edison and the Southern California Gas Company as applicable to ensure adequate energy utility service and long-term supply is available.
- Implement CEQA during the development review process for future projects. Analyze and mitigate potential public facility, service, and utility impacts to the maximum extent practicable. For projects that require construction of new public facilities or extension of utilities, ensure that the environmental documentation considers related off-site physical environmental impacts of these activities.

Adherence to and implementation of Project policies and ongoing City practices supporting energy conservation and implementing CEQA on a project-by-project basis as applicable will reduce overall demand for energy, thereby reducing demand on existing energy facilities. However, specific development proposals consistent with the Project could require improvements to existing energy facilities or extension of facilities to currently underserved areas within the Planning Area.

The specific environmental impact of constructing energy facilities cannot be determined at this programmatic level of analysis because no specific projects are proposed; however, like the development of other uses allowed under the Project, development and operation of public facilities, including energy facilities, may result in potentially significant impacts that will be evaluated and addressed on a case-by-case basis when specific projects are proposed. Per CEQA Guidelines Section 15152, this deferral of analysis is appropriate for a programmatic level EIR.

## **Mitigation Measures**

No mitigation is required as Project impacts will be less than significant at the programmatic level.

## **Level of Impact after Mitigation**

With adherence to and implementation of the above General Plan policies, the Project's impact on energy supply and energy facilities will be less than significant at the programmatic level.

# Solid Waste

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## Environmental Setting

The City of Riverside Public Works Department collects trash from approximately 38,500 households (80 percent of all households) largely using automated trash collection trucks. Excessive waste generation is discouraged by the Public Works Department by charging additional costs if a second trash container is required. The remaining portion of the City is collected by a private contractor. The private collector services customers in the La Sierra, University and Orangecrest neighborhoods.

All non-hazardous solid waste collected is tipped at the Robert A. Nelson Transfer Station, which is owned by the County of Riverside and operated under a 20-year franchise by a private company. Waste is transferred to the “Badlands” Landfill for disposal. However, local trash haulers may dispose of collected waste at other County landfills in the area, such as the Lamb Canyon Landfill and El Sobrante landfill. All Riverside County landfills are Class III disposal sites permitted to receive non-hazardous municipal solid waste.

Badlands Landfill: The Badlands Landfill, located east of Moreno Valley, encompasses 1,093 acres, of which 150 acres are permitted for landfilling and another 70 acres are permitted for excavation and stockpiling cover material and other ancillary activities. The landfill is currently permitted to receive 4,000 tons per day and as of 2004, has a remaining disposal capacity of 9.31 million tons. From March 1, 2003 through February 29, 2004, the landfill received a total of 426,532 tons of refuse for disposal and an average of 1,497 tons per day. The Badlands Landfill is expected to reach capacity between 2018 and 2020; however, the landfill site has potential for further expansion.

El Sobrante Landfill: The El Sobrante Landfill is located east of Interstate 15 and Temescal Canyon Road to the south of the City of Corona and Cajalco Road at 10910 Dawson Canyon Road. The landfill encompasses 1,322 acres, of which 645 acres are permitted for landfilling. The El Sobrante Landfill is currently permitted to receive 10,000 tons of refuse per day (tpd), of which 4,000 tpd is reserved for refuse generated within Riverside County. The landfill has a total capacity of approximately 109 million tons, of which approximately 68 million tons are reserved for in-County waste. As of March 10, 2004, the landfill’s remaining capacity is approximately 97 million tons. From March 1, 2003 through February 29, 2004, the El Sobrante Landfill accepted a total of approximately 2.046 million tons of waste, of which 812,000 tons were generated within Riverside County. The landfill is expected to continue receiving solid waste until 2033.

Lamb Canyon Landfill: The Lamb Canyon Landfill is located between the City of Beaumont and the City of San Jacinto at 16411 Lamb Canyon Road (State Route 79). The landfill encompasses approximately 1,088 acres, of which 178 acres are permitted landfill acreage. The landfill is currently permitted to receive 1,900 tpd for disposal and has a remaining disposal capacity of approximately 5,000,000 tons as of March 2004. From March 1, 2003 through February 29, 2004, the landfill received a total tonnage of 186,566, averaging 628



tons per day. A proposal to expand the Lamb Canyon Landfill footprint to encompass an additional 144.6 acres and increase its maximum daily disposal capacity to 3,000 tons is currently under review. The expansion proposal will result in a total landfill capacity of 16.2 million tons, which will extend the use of facility to approximately 2023. Further landfill expansion potential also exists on the site.

Hazardous waste is not accepted at County landfills. Businesses that generate less than 27 gallons, or 220 pounds of hazardous waste, or 2.2 pounds of extremely hazardous waste, contract with the Conditionally Exempt Small Quantity Generator (CESQG) Program to dispose of their waste. The CESQG Program was established by the Riverside County Environmental Health – Hazardous Material Management Division and currently has 25 mobile hazardous waste collection sites. The City offers a periodic drop-off site at 8095 Lincoln Avenue for household hazardous wastes. A county site at 6851 Van Buren will also accept antifreeze, batteries, oil and paint.

The County of Riverside requires permits for businesses that generate more than 27 gallons, or 220 pounds of hazardous waste, or 2.2 pounds of extremely hazardous waste. The Riverside County Community Health Agency's Environmental Health, Hazardous Materials Division maintains a list by ZIP code of hazardous disposal companies that can be contracted with to dispose of large quantities of hazardous waste.

Public Resources Code Section 41780 requires every city and county in the State to divert from landfills at least 50 percent of the waste generated within their jurisdiction in 2000. The Legislature amended this statute in 2000, requiring jurisdictions to sustain their waste diversion efforts into the future. In 2002, the City's waste diversion rate was 58 percent, in compliance with Section 41780.<sup>6</sup>

## Thresholds for Determining Level of Impact

For the purpose of this EIR, a significant impact will occur if implementation of the Project will:

- Not be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; or
- Not comply with federal, state and local statutes and regulations related to solid waste.

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<sup>6</sup> California Integrated Waste Management Board. 2002. Riverside Cities Exceed 50 Percent Waste Diversion. Retrieved on February 13, 2004 from <http://www.ciwmb.ca.gov/pressroom/2002/march/014.htm>.

## Environmental Impact

Development pursuant to Project policies and regulatory standards will result in the addition of up to 30,908 new dwelling units and 39,598 square feet of new non-residential construction over the 20-year horizon of the General Plan within the Planning Area. This growth will generate an increased demand for solid waste collection and disposal capacity. As shown in **Table 5.13-11**, the generation of solid waste is anticipated to increase by 246 tons per day at buildout.

**Table 5.11-11**  
**Estimated Future Solid Waste Generation**  
**from the Planning Area**

<b>Land Use</b>	<b>Generation Factor (lbs/day)</b>	<b>Proposed (du/ksf)</b>	<b>Estimated Solid Waste Generation 2025 (tons/day)</b>
Single-Family Residential	10/du	24,906 du	124.5
Multi-Family Residential*	7/du	2,082 du	8.3
Commercial, Light Industrial and Office	6/ksf	32,392 ksf	97.2
Community Facilities	8/ksf	4,010 ksf	16.0
<b>TOTAL</b>			<b>246.0 tons/day</b>

Source: Generation Factors from the Orange County Sanitation Department.

Notes: du = dwelling units; ksf = thousand square feet

\*Land use designations with 15 du/acre or greater are assumed to be multi-family.

Regional landfills have sufficient capacity to meet the long-term solid waste disposal needs of the City of Riverside.

The City of Riverside has earned the distinction of being a Model City for Local Government Recycling and Waste Reduction.<sup>7</sup> Prior to the passage of the California Integrated Waste Management Act (IWMA) in 1989, the City of Riverside had no developed recycling program. After passage of IWMA, the City became proactive in the recycling and reduction of solid waste. As early as 1995, the City of Riverside met the IWMA's requirement of diverting 50 percent of solid waste from landfills by the year 2000. Waste reduction programs supported by the City in the proposed General Plan are described below. These programs currently do not extend to all residents within the Planning Area.

## Green Waste Collection

Green waste collection was the City of Riverside's first waste diversion program. At present, the green waste collection program includes plants, grass, weeds, leaves, tree limbs, wood waste and Christmas trees (at specified times in January). Switching from twice-a-week

<sup>7</sup> California Integrated Waste Management Board. 2002.  
<http://www.ciwmb.ca.gov/LGLibrary/Innovations/Riverside/>

collection of trash to once-a-week collection of trash and green waste allowed the attainment of significant diversion without an increase in operating cost. Green waste is typically converted into mulch and used for composting.

## **Curbside Recycling**

The City of Riverside did not start off its diversion efforts with a residential curbside collection as did most other communities in California. A student-led initiative brought the issue to the City Council. The City of Riverside responded positively, directing its staff to study the issue and to develop a fully automated collection system. The program includes weekly collection of paper, glass, plastics and metals. "Blue container" recyclables are tipped at the Robert A. Nelson Transfer Station and transferred to an intermediate processing facility operated by a private company.

## **Newspaper Drop-Off**

In addition to curbside collection of old newspapers, the City, working with the local *Press-Enterprise*, maintains eight drop-off sites for newspaper recycling. Each site has a recycled plastic barn to house the paper.

## **Tires**

The City of Riverside offers a "car tire amnesty program" in conjunction with collections of household hazardous wastes. City residents are allowed to bring up to four used auto tires to these collection events. Truck tires and tires from commercial sources are not acceptable. A company that recycles them into a crumb rubber product takes the tires received at these events.

## **White Goods**

The City of Riverside contracts with a private company to pick up relevant white goods, or appliances, for removal of freon. Non-freon appliances are taken by scrap metal companies for recycling.

## **Other Programs**

### **Backyard Composting Workshop**

Beginning in 2004, the City will be hosting several free Backyard Composting Workshops. The City of Riverside residents can learn to properly compost green waste at home, keeping it from entering the waste stream.

### **Refrigerator Recycling Rebate Program (Cool Returns Program)**

Cool Returns is a public benefit program that offers residential electric customers a rebate for recycling older operating inefficient refrigerators and stand alone freezers. Additionally,

the program includes a provision for these units to be picked-up free of charge and transported to a recycling facility for dismantling and processing.

### **C.U.R.E. –Clean Up Riverside’s Environment Program**

C.U.R.E. is a community-wide program that focuses on promoting the value to having a clean city, raising consciousness of litter habits and improving overall community pride and involvement. Recent community events included the Incredible Bulk and F.O.O.T. (Focusing on Offensive Trash) Patrol. The Incredible BULK was a free bulky item drop-off event that took place in several locations that enabled residents to get rid of bulky items such as electronic waste and tires. The F.O.O.T. Patrol was held at 19 locations in the City. At each location residents cleaned up debris and garbage from public locations.

### **Recycling Market Development Zone**

City businesses which either divert recyclable materials from the waste stream or utilize recycled material in their manufacturing process may qualify for a variety of incentives administered by the California Integrated Waste Management Board. The Riverside County Recycling Market Development Zone including below market, low interest loans from the state for up to \$2 million to finance land, building or equipment or for use as working capital.

### **Outreach and Education**

The City of Riverside is involved in extensive outreach and education activities with respect to the three Rs (reduce, reuse, recycle) in particular and to a more sustainable environment in general. The City of Riverside acts independently and in conjunction with a variety of institutions including:

- County of Riverside.
- Riverside Chambers of Commerce.
- Western Riverside Council of Governments (WRCOG).
- Alvord and Riverside Unified School Districts.
- The local colleges and universities.

The General Plan Public Facilities Element includes the following objective and policies, adherence to which will reduce the amount of solid waste generated within the Planning Area:

#### **Objective PF-5: Minimize the volume of waste materials entering regional landfills.**

Policy PF-5.1: Develop innovative methods and strategies to reduce the amount of waste materials entering landfills. The City should aim to achieve 100% recycling citywide for both residential and non-residential development.

Policy PF-5.2: Gradually expand recycling and waste diversion programs to all City addresses.

Policy PF-5.3: Develop programs that encourage residents to donate or dispose of surplus furniture, old electronics, clothing and other household items rather than disposing of such materials in landfills.

Policy PF-5.4 Implement more severe fines for dumping bio-solids into the City's sewer and storm drain system.

Adherence to and implementation of the policies above will substantially lessen solid waste impacts. In addition, the continuation of the following City standards and practices will also help reduce the overall amount of waste:

- Continue to implement waste diversion programs as well as public education programs as outlined in the City's Source Reduction and Recycling Element.
- During the development review process, review proposed projects for consistency with the City's Source Reduction and Recycling Element.
- Continue implementing, and participating in programs that increase the City's diversion of solid waste from regional landfills. Existing programs supported by the City include: Green Waste Collection, Curbside Recycling, Newspaper Drop-Off, Car Tire Amnesty, Household Hazardous Waste, Appliances, Backyard Composition Workshops, Refrigerator Recycling Rebate (Cool Returns), C.U.R.E., Electronic waste, Curbside Oil Collection and Recycling Market Development Zone. Support expansion of these programs to all City addresses.
- Implement CEQA during the development review process for future projects. Analyze and mitigate potential public facility, service, and utility impacts to the maximum extent practicable. For projects that require construction of new public facilities or extension of utilities, ensure that the environmental documentation considers related off-site physical environmental impacts of these activities.

The Planning Area is served by regional landfills with sufficient capacity to meet the City's long-term solid waste disposal needs; therefore, the impact to regional landfills is less than significant. Continued support of the many ongoing waste reduction and recycling programs, as well as adherence to and implantation of the above listed policies and practices will ensure that impacts related to the City's continued compliance with PRC Section 41780 will be less than significant.

## Mitigation Measures

No mitigation is required, as impact will be less than significant at the programmatic level.

## Level of Impact after Mitigation

Regional landfills have indicated adequate long-term capacity and therefore the Project will not impact these facilities. With adherence to and implementation of the above General Plan policies, the Project's impact upon solid waste facilities will be less than significant at the programmatic level.

## Telecommunications Infrastructure

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### Environmental Setting

Compared to traditional types of infrastructure such as roads and water lines, planning for "high-technology" infrastructure is a relatively recent phenomenon. The convergence of data, telephone, television, satellites and the personal computer has created a dynamic world of interactive communications possibilities. Providing and supporting evolutions in communications infrastructure will provide a vital framework for job and commercial growth, educational opportunities and quality of life issues for the City of Riverside.

The City of Riverside has already begun to differentiate itself from other communities by planning for electronic infrastructure needs and creating environment that is attractive to their workforce and to the community as a whole. Several key programs that the City of Riverside has initiated include the Downtown Wireless Mall project, "cybraries", and the Smart Home Infrastructure Project.

### Existing Programs

#### The Smart Home Infrastructure Program (SHIP)

The Smart Home Infrastructure Program (SHIP) is a recently approved incentive program. The program provides incentives for homebuilders to pre-wire homes to accommodate future technologies which use coaxial cable, data cable, and/or telephone lines.

#### Cybraries

While rapid development of the Internet has expanded access to communication, education, information and consumer opportunities for many people, the Internet has also has produced a "digital divide" – a gap between those who have easy access to an Internet connection at home and those who do not. In 1998, the City of Riverside began an innovation program to create several "cybraries" in areas of the community where access to libraries and the Internet is inadequate.

Developed in 1998, the Eastside Cybrary is a satellite of the the City of Riverside Public Library, and offers a collection of "virtual" materials found through the library's online databases, CD-ROM software and the Internet. The Cybrary also provides training for youth in the use of computer technology for finding and evaluating information. Adult

training consists of training in basic computer and information literacy skills, special workshop presentations and access to GED, ESL, literacy resources and career development.

In 2000, the Nichols Cybrary Center opened its doors and is also a satellite service point of the City of Riverside Public Library located in the Joyce Jackson Community Center at Nichols Park. This center also offers students a collection of "virtual" materials found through the Library's online databases, including CD-ROM software and the Internet.

### **Downtown Wireless Mall**

The Downtown Wireless Mall project was inaugurated by the City in early 2004. The project will enable any user with a laptop or handheld computer to access the Internet for free from various locations up and down the Main Street Mall. If successful, the plan is to roll out similar networks, at other locations around the City of Riverside, including University Village and the Galleria at Tyler.

### **SmartRiverside**

SmartRiverside (formerly Riverside Community Online) is a local non-profit that aims to improve the quality of life for the City of Riverside residents and businesses.

## **Threshold for Determining Level of Impact**

For the purpose of this EIR, a significant impact will occur if implementation of the Project will result in overwhelming demand for telecommunications systems and/or substantial adverse physical impacts associated with the provision of new or physically altered telecommunication facilities, need for new or physically altered telecommunication facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for telecommunications.

## **Impact Analysis**

Development pursuant to Project policies and regulatory standards will result in the addition of up to 38,100 new dwelling units and 39,600,000 square feet of new non-residential construction over the 20-year horizon of the General Plan within the Planning Area. New development and population growth will generate an increased demand on telecommunications infrastructure. This demand may result in the need for additional telecommunications infrastructure. As this is a first-tier, program EIR, CEQA analysis of the construction of such specific facilities may be properly deferred until plans for such facilities are developed. Since such plans have not been developed, mitigation for any such facilities would be speculative at the programmatic level of analysis.

The General Plan Public Facilities Element includes the following objectives and policies related to telecommunications infrastructure planning within the Planning Area:

**Objective PF-7: Ensure that Riverside residents, the business community and educational institutions have easy access to state-of-the-art internet services and modern telecommunications technology.**

Policy PF-7.1: Provide innovative, targeted technology projects and related economic development incentives.

Policy PF-7.2: Continue to support the goals and mission of SmartRiverside.

Policy PF-7.3: Prepare and implement a Telecommunications Master Plan.

Policy PF-7.4: Encourage new development to be wired or provided with other necessary infrastructure for up-to-date telecommunications services.

Policy PF-7.5: Market and encourage homebuilders to participate in the Smart Home Infrastructure Program.

Policy PF-7.6: Provide flexibility within the Zone Code to encourage technology and home-based businesses.

Policy PF-7.7: Examine the option of the City owning a television station.

Policy PF-7.8: Encourage competition of cable providers.

Policy PF-7.9: Continue to work with Riverside Public Utilities and private telecommunications infrastructure operators and owners to ensure that Riverside has state-of-the-art internet and telecommunication facilities, system upgrades, features and coverages.

**Objective PF-8: Expand the accessibility of internet and similar communications services throughout the community.**

Policy: PF-8.1 Develop partnerships with K-12 schools to promote the student use of technology to promote high-level learning.

Policy PF-8.2: Encourage innovative internet access projects such as the Downtown Wireless Mall project.

Policy PF-8.3 Expand development of cybraries.

Adherence to and implementation of the policies listed above will significantly lessen impacts directly related to the Project. Individual development proposals will continue to comply with existing City practices regarding telecommunications infrastructure. These practices include:

- Implement CEQA during the development review process for future projects, including the construction of new telecommunications facilities. Analyze and mitigate potential public facility, service and utility impacts to the maximum extent



practicable. For projects that require construction of new public facilities or extension of utilities, ensure that the environmental documentation considers related off-site physical environmental impacts of these activities.

- Monitor the usage levels of telecommunications infrastructure to determine if any particular segments or components are experiencing demand in excess of capacity; identify and implement needed improvements as necessary.

With adherence to and implementation of the above listed Project policies and practices, the impact to telecommunications infrastructure will be less than significant at the programmatic level.

The specific environmental impact of constructing telecommunications infrastructure cannot be determined at this programmatic level of analysis because no specific projects are proposed; however, like the development of other uses consistent with the Project, development and operation of public facilities, including telecommunications infrastructure, may result in potentially significant impacts that will be evaluated and addressed on a case-by-case basis when specific projects are proposed.

## Mitigation Measures

No mitigation is required as the Project impact will be less than significant at the programmatic level.

## Level of Impact after Mitigation

With adherence to and implementation of the above General Plan policies, the Project's impact to telecommunications infrastructure will be less than significant at the programmatic level.

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